

218-382

| | | | |
|--|--|-------------------------------------|-------------------------|
| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | | |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT | | Docket Number: 2885/29 | |
| Application Number 09/494,567 | Filing Date January 13, 2000 | Examiner Tonia L. Meonske | Art Unit 2183 |
| Invention Title RUN-TIME RECONFIGURATION METHOD FOR PROGRAMMABLE UNITS | | Inventor VORBACH et al. | |

Address to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on

Date: 8 Feb 2005 Reg. No. 36,098

Signature: Michelle M. Carniaux

SIR:

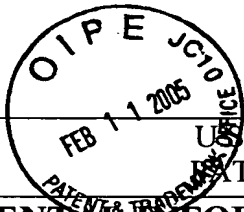
1. In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and in conformance with the procedures of 35 U.S.C. §§ 1.97 and 1.98 and M.P.E.P. § 609, attorneys for Applicant hereby brings the following references to the attention of the Examiner. These references are listed on the attached modified PTO Form No. 1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.
2. The filing of this Information Disclosure Statement and the enclosed PTO 1449 shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b).
3. A copy of each patent, publication or other information listed on the modified PTO 1449 is enclosed.
4. It is believed that no fees are due in connection with this Information Disclosure Statement. However, should any fees be due, the Commissioner is authorized to charge Deposit Account No. 11-0600 for such fees. A duplicate copy of this communication is enclosed for charging purposes.

Respectfully submitted,

Dated: February 8, 2005

CUSTOMER NUMBER 26646

By: Michelle M. Carniaux (Reg. No. 36,098)
KENYON & KENYON
One Broadway
New York, N.Y. 10004
(212) 425-7200 (telephone)
(212) 425-5288 (facsimile)



| | | | |
|--|--|-------------------------------------|-------------------------|
| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | | |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT | | Docket Number: 2885/29 | |
| Application Number 09/494,567 | Filing Date January 13, 2000 | Examiner Tonia L. Meonske | Art Unit 2183 |
| Invention Title RUN-TIME RECONFIGURATION METHOD FOR PROGRAMMABLE UNITS | | Inventor VORBACH et al. | |

Address to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on

Date: 8 Feb 2005 Reg. No. 36,098

Signature: Michelle M. Carniaux

SIR:

1. In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and in conformance with the procedures of 35 U.S.C. §§ 1.97 and 1.98 and M.P.E.P. § 609, attorneys for Applicant hereby brings the following references to the attention of the Examiner. These references are listed on the attached modified PTO Form No. 1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.
2. The filing of this Information Disclosure Statement and the enclosed PTO 1449 shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. §1.56(b).
3. A copy of each patent, publication or other information listed on the modified PTO 1449 is enclosed.
4. It is believed that no fees are due in connection with this Information Disclosure Statement. However, should any fees be due, the Commissioner is authorized to charge Deposit Account No. 11-0600 for such fees. A duplicate copy of this communication is enclosed for charging purposes.

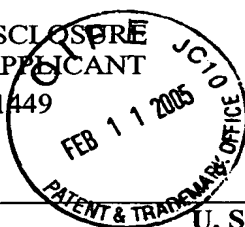
Respectfully submitted,

Dated: February 8, 2005

CUSTOMER NUMBER 26646

By: Michelle M. Carniaux (Reg. No. 36,098)
KENYON & KENYON
One Broadway
New York, N.Y. 10004
(212) 425-7200 (telephone)
(212) 425-5288 (facsimile)

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
PTO FORM 1449



Atty. Docket No.:
2885/29

Serial No.:
09/494,567

Applicant(s):
Vorbach et al.

Filing Date:
January 31, 2000

Group Art Unit:
2661

U. S. PATENT DOCUMENTS

| EXAMINER'S INITIALS | PATENT/ PUBLICATION NUMBER | PATENT/ PUBLICATION DATE | NAME | CLASS | SUB CLASS | FILING DATE* |
|------------------------|----------------------------------|--------------------------------|--------------------------|-------|--------------|-----------------|
| | 2,067,477 | January 12, 1937 | J.B. Cooper | | | |
| | 3,242,998 | March 29, 1966 | C.H. Gubbins | | | |
| | 3,681,578 | August 1, 1972 | Stevens | | | |
| | 3,757,608 | September 11, 1973 | Willner | | | |
| | 3,855,577 | December 17, 1974 | Vandierendonck | | | |
| | 4,498,172 | February 5, 1985 | Bhavsar | | | |
| | 4,566,102 | January 21, 1986 | Hefner | | | |
| | 4,663,706 | May 5, 1987 | James et al. | | | |
| | 4,682,284 | July 21, 1987 | Schrofer | | | |
| | 4,720,780 | January 19, 1988 | Dolecek | | | |
| | 4,852,043 | July 25, 1989 | Guest | | | |
| | 4,860,201 | August 22, 1989 | Miranker et al. | | | |
| | 4,891,810 | January 2, 1990 | de Corlieu et al. | | | |
| | 4,910,665 | March 20, 1990 | Mattheyses et al. | | | |
| | 5,047,924 | September 10, 1991 | Matsubara et al. | | | |
| | 5,065,308 | November 12, 1999 | Evans | | | |
| | 5,072,178 | December 10, 1991 | Matsumoto | | | |
| | 5,144,166 | September 1, 1992 | Camarota et al. | | | |
| | 5,193,202 | March 9, 1993 | Lee et al. | | | |
| | 5,203,005 | April 13, 1993 | Horst | | | |
| | 5,274,593 | December 28, 1993 | Proebsting | | | |
| | 5,294,119 | March 15, 1994 | Vincent et al. | | | |
| | 5,301,284 | April 5, 1994 | Estes et al. | | | |
| | 5,347,639 | September 13, 1994 | Rechtschaffen et al. | | | |
| | 5,349,193 | September 20, 1994 | Mott et al. | | | |
| | 5,353,432 | October 4, 1994 | Richek et al. | | | |
| | 5,379,444 | January 3, 1995 | Mumme | | | |
| | 5,410,723 | April 25, 1995 | Schmidt et al. | | | |
| | 5,425,036 | June 13, 1995 | Liu et al. | | | |
| | 5,428,526 | June 27, 1995 | Flood et al. | | | |
| | 5,465,375 | November 7, 1995 | Thepaut et al. | | | |
| | 5,475,856 | December 12, 1995 | Kogge | | | |
| | 5,530,873 | June 25, 1996 | Takano | | | |
| | 5,530,946 | June 25, 1996 | Bouvier et al. | | | |
| | 5,574,930 | November 12, 1996 | Halverson Jr. et al. | | | |
| | 5,600,265 | February 4, 1997 | El Gamal Abbas et al. | | | |
| | 5,611,049 | March 11, 1997 | Pitts | | | |
| | 5,625,806 | April 29, 1997 | Kromer | | | |

| EXAMINER'S INITIALS | PATENT/ PUBLICATION NUMBER | PATENT/ PUBLICATION DATE | NAME | CLASS | SUB CLASS | FILING DATE* |
|---------------------|----------------------------------|--------------------------------|--------------------|-------|--------------|-----------------|
| | 6,092,174 | July 18, 2000 | Roussakov | | | |
| | 6,105,105 | August 15, 2000 | Trimberger et al. | | | |
| | 6,119,181 | September 12, 2000 | Vorbach et al. | | | |
| | 6,125,408 | September 26, 2000 | McGee et al. | | | |
| | 6,172,520 | January 9, 2001 | Lawman et al. | | | |
| | 6,173,434 | January 9, 2001 | Wirthlin et al. | | | |
| | 6,202,182 | March 13, 2001 | Abramovici et al. | | | |
| | 6,219,833 | April 17, 2001 | Solomon et al. | | | |
| | 6,230,307 | May 8, 2001 | Davis et al. | | | |
| | 6,243,808 | June 5, 2001 | Wang | | | |
| | 6,260,179 | July 10, 2001 | Ohsawa et al. | | | |
| | 6,263,430 | July 17, 2001 | Trimberger et al. | | | |
| | 6,279,077 | August 21, 2001 | Nasserbakht et al. | | | |
| | 6,282,627 | August 28, 2001 | Wong et al. | | | |
| | 6,288,566 | September 11, 2001 | Hanrahan et al. | | | |
| | 6,289,440 | September 11, 2001 | Casselman | | | |
| | 6,298,472 | October 2, 2001 | Phillips et al. | | | |
| | 6,311,200 | October 30, 2001 | Hanrahan et al. | | | |
| | 6,321,366 | November 20, 2001 | Tseng et al. | | | |
| | 6,321,373 | November 20, 2001 | Ekanadham et al. | | | |
| | 6,338,106 | January 8, 2002 | Vorbach et al. | | | |
| | 6,341,318 | January 22, 2002 | Dakhil | | | |
| | 6,347,346 | February 12, 2002 | Taylor | | | |
| | 6,349,346 | February 19, 2002 | Hanrahan et al. | | | |
| | 6,370,596 | April 9, 2002 | Dakhil | | | |
| | 6,378,068 | April 23, 2002 | Foster et al. | | | |
| | 6,389,379 | May 14, 2002 | Lin et al. | | | |
| | 6,389,579 | May 14, 2002 | Phillips et al. | | | |
| | 6,392,912 | May 21, 2002 | Hanrahan et al. | | | |
| | 6,405,299 | June 11, 2002 | Vorbach et al. | | | |
| | 6,421,817 | July 16, 2002 | Mohan et al. | | | |
| | 6,425,068 | July 23, 2002 | Vorbach et al. | | | |
| | 6,457,116 | September 24, 2002 | Mirsky et al. | | | |
| | 6,477,643 | November 5, 2002 | Vorbach et al. | | | |
| | 6,480,937 | November 12, 2002 | Vorbach et al. | | | |
| | 6,480,954 | November 12, 2002 | Trimberger et al. | | | |
| | 6,513,077 | January 28, 2003 | Vorbach et al. | | | |
| | 6,519,674 | February 11, 2003 | Lam et al. | | | |
| | 6,526,520 | February 25, 2003 | Vorbach et al. | | | |
| | 6,538,468 | March 25, 2003 | Moore | | | |
| | 6,539,477 | March 25, 2003 | Seawright | | | |
| | 6,542,998 | April 1, 2003 | Vorbach et al. | | | |
| | 6,571,381 | May 27, 2003 | Vorbach et al. | | | |
| | 6,587,939 | July 1, 2003 | Takano | | | |

| EXAMINER'S INITIALS | PATENT/ PUBLICATION NUMBER | PATENT/ PUBLICATION DATE | NAME | CLASS | SUB CLASS | FILING DATE* |
|---------------------|----------------------------------|--------------------------------|------------------|-------|--------------|-----------------|
| | 5,649,176 | July 15, 1997 | Selvidge et al. | | | |
| | 5,649,179 | July 15, 1997 | Steenstra et al. | | | |
| | 5,655,069 | August 5, 1997 | Ogawara et al. | | | |
| | 5,657,330 | August 12, 1997 | Matsumoto | | | |
| | 5,675,743 | October 7, 1997 | Mavity | | | |
| | 5,680,583 | October 21, 1997 | Kuijsten | | | |
| | 5,717,943 | February 10, 1998 | Barker et al. | | | |
| | 5,732,209 | March 24, 1998 | Vigil et al. | | | |
| | 5,754,827 | May 19, 1998 | Barbier et al. | | | |
| | 5,760,602 | June 2, 1998 | Tan | | | |
| | 5,773,994 | June 30, 1998 | Jones | | | |
| | 5,784,636 | July 21, 1998 | Rupp | | | |
| | 5,794,059 | August 11, 1998 | Barker et al. | | | |
| | 5,794,062 | August 11, 1998 | Baxter | | | |
| | 5,802,290 | September 1, 1998 | Casselman | | | |
| | 5,828,229 | October 27, 1998 | Cliff et al. | | | |
| | 5,848,238 | December 8, 1998 | Shimomura et al. | | | |
| | 5,854,918 | December 29, 1998 | Baxter | | | |
| | 5,859,544 | January 12, 1999 | Norman | | | |
| | 5,865,239 | February 2, 1999 | Carr | | | |
| | 5,867,723 | February 2, 1999 | Peters et al. | | | |
| | 5,884,075 | March 16, 1999 | Hester et al. | | | |
| | 5,887,162 | March 23, 1999 | Williams et al. | | | |
| | 5,889,982 | March 30, 1999 | Rodgers et al. | | | |
| | 5,892,370 | April 6, 1999 | Eaton et al. | | | |
| | 5,901,279 | May 4, 1999 | Davis III | | | |
| | 5,924,119 | July 13, 1999 | Sindhu et al. | | | |
| | 5,933,642 | August 3, 1999 | Baxter et al. | | | |
| | 5,966,534 | October 12, 1999 | Cooke et al. | | | |
| | 5,970,254 | October 19, 1999 | Cooke et al. | | | |
| | 6,011,407 | January 4, 2000 | New | | | |
| | 6,021,490 | February 1, 2000 | Vorbach et al. | | | |
| | 6,023,564 | February 8, 2000 | Trimberger | | | |
| | 6,023,742 | February 8, 2000 | Ebeling et al. | | | |
| | 6,034,538 | March 7, 2000 | Abramovici | | | |
| | 6,038,650 | March 14, 2000 | Vorbach et al. | | | |
| | 6,038,656 | March 14, 2000 | Cummings et al. | | | |
| | 6,047,115 | April 4, 2000 | Mohan et al. | | | |
| | 6,049,222 | April 11, 2000 | Lawman | | | |
| | 6,058,469 | May 2, 2000 | Baxter | | | |
| | 6,081,903 | June 27, 2000 | Vorbach et al. | | | |
| | 6,085,317 | July 4, 2000 | Smith | | | |
| | 6,086,628 | July 11, 2000 | Dave et al. | | | |
| | 6,088,795 | July 11, 2000 | Vorbach et al. | | | |

| EXAMINER'S INITIALS | PATENT/ PUBLICATION NUMBER | PATENT/ PUBLICATION DATE | NAME | CLASS | SUB CLASS | FILING DATE* |
|---------------------|----------------------------------|--------------------------------|-----------------|-------|--------------|-----------------|
| | 6,657,457 | December 2, 2003 | Hanrahan et al. | | | |
| | 6,697,979 | February 24, 2003 | Vorbach et al. | | | |
| | 6,687,788 | February 3, 2004 | Vorbach et al. | | | |
| | 2002/0038414 | March 28, 2002 | Taylor et al. | | | |
| | 2002/0143505 | October 3, 2002 | Drusinsky | | | |
| | 2002/0144229 | October 3, 2002 | Hanrahan | | | |
| | 2002/0165886 | November 7, 2002 | Lam | | | |
| | 2003/0123579 | July 3, 2003 | Safavi et al. | | | |
| | 2003/0014743 | January 16, 2003 | Cooke et al. | | | |
| | 2003/0046607 | March 6, 2003 | Vorbach | | | |
| | 2003/0052711 | March 20, 2003 | Taylor et al. | | | |
| | 2003/0055861 | March 20, 2003 | Lai et al. | | | |
| | 2003/0056085 | March 2, 2003 | Vorbach | | | |
| | 2003/0056091 | March 20, 2003 | Greenberg | | | |
| | 2003/0056202 | March 20, 2003 | Vorbach | | | |
| | 2003/0093662 | May 15, 2003 | Vorbach et al. | | | |
| | 2003/0097513 | May 22, 2003 | Vorbach et al. | | | |
| | 2003/0135686 | July 17, 2003 | Vorbach et al. | | | |
| | 2004/0015899 | January 22, 2004 | May et al. | | | |
| | 2004/0025005 | February 5, 2004 | Vorbach et al. | | | |

FOREIGN PATENT DOCUMENTS

| EXAMINER'S INITIALS | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
|------------------------|--------------------|--------------------|---------|-------|-----------|-------------|----|
| | | | | | | YES | NO |
| | 0 463 721 | January 2, 1992 | Europe | | | | |
| | 0 477 809 | April 1, 1992 | Europe | | | | |
| | 0 485 690 | May 20, 1992 | Europe | | | | |
| | 0 497 029 | August 5, 1992 | Europe | | | | |
| | 0 628 917 | December 14, 1994 | Europe | | | | |
| | 0 686 915 | December 13, 1995 | Europe | | | | |
| | 0 726 532 | July 2, 1998 | Europe | | | | |
| | 0 835 685 | October 2, 1996 | Europe | | | | |
| | 0 926 594 | June 30, 1999 | Europe | | | | |
| | 1 102 674 | July 13, 1999 | Europe | | | | |
| | 1 146 432 | October 17, 2001 | Europe | | | | |
| | 42 21 278 | January 5, 1994 | Germany | | | | |
| | 38 55 673 | November 20, 1996 | Germany | | | | |
| | 100 28 397 | December 20, 2001 | Germany | | | | |
| | 100 36 627 | February 14, 2002 | Germany | | | | |
| | 101 29 237 | April 18, 2002 | Germany | | | | |
| | 102 04 044 | August 14, 2003 | Germany | | | | |
| | 196 54 593 | July 2, 1998 | Germany | | | | |
| | 197 04 044 | August 13, 1998 | Germany | | | | |
| | 197 04 742 | September 24, 1998 | Germany | | | | |

| | | | | | | | |
|--|-------------|--------------------|---------|--|--|--|--|
| | 198 07 872 | August 26, 1999 | Germany | | | | |
| | 198 61 088 | February 10, 2000 | Germany | | | | |
| | 199 26 538 | December 14, 2000 | Germany | | | | |
| | WO98/26356 | June 18, 1998 | PCT | | | | |
| | WO98/28697 | July 2, 1998 | PCT | | | | |
| | WO98/29952 | July 9, 1998 | PCT | | | | |
| | WO98/31102 | July 16, 1998 | PCT | | | | |
| | WO98/35299 | August 13, 1998 | PCT | | | | |
| | WO99/00731 | January 7, 1999 | PCT | | | | |
| | WO99/00739 | January 7, 1999 | PCT | | | | |
| | WO99/32975 | July 1, 1999 | PCT | | | | |
| | WO99/40522 | August 12, 1999 | PCT | | | | |
| | WO99/44147 | September 2, 1999 | PCT | | | | |
| | WO99/44120 | September 2, 1999 | PCT | | | | |
| | WO00/17771 | March 30, 2000 | PCT | | | | |
| | WO00/38087 | June 29, 2000 | PCT | | | | |
| | WO00/77652 | December 21, 2000 | PCT | | | | |
| | WO02/13000 | February 14, 2002 | PCT | | | | |
| | WO02/21010 | March 14, 2002 | PCT | | | | |
| | WO02/29600 | April 11, 2002 | PCT | | | | |
| | WO02/71248 | September 12, 2002 | PCT | | | | |
| | WO02/71249 | September 12, 2002 | PCT | | | | |
| | WO02/103532 | December 27, 2002 | PCT | | | | |
| | WO03/17095 | February 27, 2003 | PCT | | | | |
| | WO03/23616 | March 30, 2003 | PCT | | | | |
| | WO03/25781 | March 27, 2003 | PCT | | | | |
| | WO03/32975 | April 24, 2003 | PCT | | | | |
| | WO03/36507 | May 1, 2003 | PCT | | | | |

OTHER DOCUMENTS

| EXAMINER'S INITIALS | AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC. |
|---------------------|--|
| | Arabi et al., "PLD Integrates Dedicated High-speed Data Buffering, Complex State Machine, and Fast Decode Array," conference record on WESCON '93, Sep. 28, 1993, pp. 432-436 |
| | Ade et al., "Minimum Memory Buffers in DSP Applications," Electronics Letters, vol. 30, No. 6, March 17, 1994, pp. 469-471 |
| | Villasenor, John et al., "Configurable Computing," Scientific American, Vol. 276, No. 6, June 1997, pp. 66-71. |
| | Villasenor, John et al., "Configurable Computing Solutions for Automatic Target Recognition," IEEE, 1996 pp. 70-79. |
| | Tau, Edward et al., "A First Generation DPGA Implementation," FPD'95, pp. 138-143 |
| | Athanas, Peter et al., "Quantitative analysis of floating point arithmetic on FPGA based custom computing machines," IEEE Symposium on FPGAs For Custom Computing Machines, IEEE Computer Society Press, April 19-21, 1995, pp. i-vii, 1-222 |
| | Athanas, Peter et al., "An Adaptive Hardware Machine Architecture and Compiler for Dynamic Processor Reconfiguration", IEEE, Laboratory for Engineering Man/Machine Systems Division of Engineering, Box D, Brown University Providence, Rhode Island, 1991, pages 397-400 |
| | Bittner, Ray A. Jr., "Wormhole Run-time Reconfiguration: Conceptualization and VLSI Design of a High Performance Computing System," Dissertation, January 23, 1997, pp. I-XX, 1-415 |
| | Myers, G. "Advances in Computer Architecture," Wiley-Interscience Publication, 2nd ed., John Wiley & |

| EXAMINER'S INITIALS | AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC. |
|---------------------|--|
| | Sons, Inc. pp. 463-94, 1978. |
| | M. Saleeba, "A Self-Contained Dynamically Reconfigurable Processor Architecture," Sixteenth Australian Computer Science Conference, ASCS-16, QLD, Australia, February, 1993. |
| | M. Morris Mano, "Digital Design," by Prentice Hall, Inc., Englewood Cliffs, New Jersey 07632, 1984, pp. 119-125, 154-161. |
| | Maxfield, C. "Logic that Mutates While-U-Wait" EDN (Bur. Ed) (USA), EDN (European Edition), 7 November 1996, Cahners Publishing, USA |
| | Norman, Richard S., "Hyperchip Business Summary, The Opportunity," January 31, 2000, pages 1-3. |
| | Ferrante J. et al., "The Program Dependence Graph and its Use in Optimization ACM Transactions on Programming Languages and Systems," July 1987, USA, [online] Bd. 9, Nr., 3, pages 319-349, XP002156651 ISSN: 0164-0935 ACM Digital Library |
| | Hwang L. et al., "Min-cut Replication in Partitioned Networks" IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, [online] Bd. 14, Nr. 1, January 1995, pages 96-106, XP00053228 USA ISSN: 0278-0070 IEEE Xplore |
| | Baumgarte, V., et al., PACT XPP "A Self-reconfigurable Data Processing Architecture," PACT Info. GMBH, Munchen Germany 2001 |
| | Jantsch, Axel et al., "A Case Study on Hardware/software Partitioning," Royal Institute of Technology, Kista, Sweden, April 10, 1994 IEEE, pp. 111-118 |
| | Becker, J. et al., "Parallelization in Co-compilation for Configurable Accelerators - a Host/accelerator Partitioning Compilation Method," proceedings of Asia and South Pacific Design Automation Conference, Yokohama, Japan, February 10-13, 1998 |
| | Issiki, Tsuyoshi et al., "Bit-Serial Pipeline Synthesis for Multi-FPGA Systems with C++ Design Capture," 1996 IEEE, pp. 38-47 |
| | Weinhardt, Markus, "Übersetzungsmethoden für strukturprogrammierbare rechner," Dissertation for Doktors der Ingenieurwissenschaften der Universität Karlsruhe: July 1, 1997 [Weinhardt, M. "Compilation Methods for Structure-programmable Computers", dissertation, ISBN 3-89722-011-3, 1997] |
| | Hammes, Jeff et al., "Cameron: High Level Language Compilation for Reconfigurable Systems," Department of Computer Science, Colorado State University, Conference on Parallel Architectures and Compilation Techniques, October 12-16, 1999 |
| | K. Wada et al., "A Performance Evaluation of Tree-based Coherent Distributed Shared Memory" Proceedings of the Pacific RIM Conference on Communications, Comput and Signal Processing, Victoria, May 19-21 1993 |
| | Nilsson et al., "The Scalable Tree Protocol - A Cache Coherence Approaches for Large-Scale Multiprocessors" IEEE, pp. 498-506 December 1992 |
| | Wu et al., "A New Cache Directory Scheme", IEEE, pp 466-472, June 1996 |
| | Hauck "The Roles of FPGA's in Reprogrammable Systems," IEEE, April 1998, pp. 615-638 |
| | Wittig et al., "OneChip: An FPGA Processor with Reconfigurable Logic" IEEE, 1996 pp. 126-135 |
| | Cadambi et al., "Managing Pipeline-reconfigurable FPGAs," ACM, 1998, pp. 55-64 |
| | Hong Yu Xu et al., "Parallel QR Factorization on a Block Data Flow Architecture" Conference Proceeding Article, March 1, 1992, pages 332-336 XPO10255276, PAGE 333, Abstract 2.2, 2.3, 2.4 - page 334 |
| | Mirsky, E. DeHon, "MATRIX: A Reconfigurable Computing Architecture with Configurable Instruction Distribution and Deployable Resources," Proceedings of the IEEE Symposium on FPGAs for Custom Computing Machines, 1996, PP. 157-1666 |
| | Cardoso, J.M.P., "Compilation of Java™ Algorithms onto Reconfigurable Computing Systems with Exploitation of Operation-Level Parallelism," Ph.D. Thesis, Universidade Tecnica de Lisboa (UTL), Lisbon, Portugal October 2000 (English Abstract included) |
| | Kung, "Deadlock Avoidance for Systolic Communication", 1988 Conference Proceedings of 15 th Annual International Symposium on Computer Architecture, May 30, 1988, pp. 252-260 |
| | TMS320C54X DSP: CPU and Peripherals, Texas Instruments, 1996, pp. 6-26 to 6-46 |
| | TMS320C54x DSP: Mnemonic Instruction Set, Texas Instruments, 1996, p. 4-64 |
| | XLINX, "Logic Cell Array Families: XC4000, XC4000A and XC4000H", product description, pages 2-7 to 2-15, Additional XC3000, XC31000 and XC3100A Data, pages 8-16 and 9-14 |

| EXAMINER'S INITIALS | AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC. |
|---------------------|---|
| | Miller, Michael J. et al., "High-Speed FIFOs Contend with Widely Differing Data Rates: Dual-port RAM Buffer and Dual-pointer System Provide Rapid, High-density Data Storage and Reduce Overhead", Computer Design, September 1, 1985, pages 83-86. |
| | Forstner, Peter "Wer Zuerst Kommt, Mahlt Zuerst!: Teil 3: Einsatzgebiete und Anwendungsbeispiele von FIFO-Speichern", Elektronik, August 2000, pages 104-109 |
| | John R. Hauser et al., "Garp: A MIPS Processor with a Reconfigurable Coprocessor", University of California, Berkeley, IEEE, 1997, pages 12-21 |
| | Jorg Donandt, "Improving Response Time of Programmable Logic Controllers by Use of a Boolean Coprocessor", AEG Research Institute Berlin, IEEE, 1989, pages 4-167 - 4-169. |
| | Alexandre F. Tenca et al., "A Variable Long-Precision Arithmetic Unit Design for Reconfigurable Coprocessor Architectures", University of California, Los Angeles, 1998, pages 216 - 225. |
| | Andreas Koch et al, "Practical Experiences with the SPARXIL Co-Processor", 1998, IEEE, pages 394 - 398 |
| | Gokhale M. B. et al., "Automatic Allocation of Arrays to Memories in FPGA processors with Multiple Memory Banks", Field-Programmable Custom Computing Machines, 1999, IEEE, pages 63-67 |
| | Christian Siemers, "Rechenfabrik Ansätze für Extrem Parallele Prozessoren", Verlag Heinze Heise GmbH., Hannover, DE No. 15, July 16, 2001, pages 170-179 |
| | Pedro Diniz et al., "Automatic Synthesis of Data Storage and Control Structures for FPGA-based Computing Engines", 2000, IEEE, pages 91-100 |
| | Markus Weinhardt et al., "Pipeline Vectorization for Reconfigurable Systems", 1999, IEEE, pages 52-60 |
| | Lizy John et al., "A Dynamically Reconfigurable Interconnect for Array Processors", Vol. 6, No. 1, March 1998, IEEE, pages 150-157 |
| | Fineberg, Samuel et al., "Experimental Analysis of a Mixed-Mode Parallel Architecture Using Bitonic Sequence Sorting", Vol. 11. No. 3, March 1991, pages 239-251 |
| | Jacob, Jeffrey et al., "Memory Interfacing and Instruction Specification for Reconfigurable Processors", ACM 1999, pages 145-154 |
| | Ye, Z.A. et al., "A Compiler for a Processor With A Reconfigurable Functional Unit," FPGA 2000 ACM/SIGNA International Symposium on Field Programmable Gate Arrays, Monterey, CA Feb. 9-11, 2000, pp. 95-100. |
| | Ling, X., "WASMII: An MPLD with Data-Driven Control on a Virtual Hardware," Journal of Supercomputing, Kluwer Academic Publishers, Dordrecht, Netherlands, 1995, pp.253-276. |
| | Villasensor, J. et al., "Express Letters Video Communications Using Rapidly Reconfigurable Hardware," IEEE Transactions on Circuits and Systems for Video Technology, IEEE, Inc. NY, December 1995, pp. 565-567. |
| | Hedge, S.J., "3D WASP Devices for On-line Signal and Data Processing, 1994, International Conference on Wafer Scale Integration, pages 11-21 |
| | Iseli, C., et al. "A C++ Compiler for FPGA Custom Execution Units Synthesis," IEEE. 1995, pp. 173-179 |
| | Alippi, C., et al., "Determining the Optimum Extended Instruction Set Architecture for Application Specific Reconfigurable VLIW CPUs, IEEE., 2001, pp. 50-56 |
| | Dutt, Nikil et al., "If Software is King for Systems-on-Silicon, What's New in Compiler?, IEEE., 1997, pp. 322-325 |
| | Piotrowski, Anton, "IEC-BUS, Die Funktionsweise des IEC-Bus und seine Anwendung in Geräten und Systemen", 1987, Franzis-Verlag GmbH, München, pp. 20-25 |
| | Zhang, N. Et al., Architectural Evaluation of Flexible Digital Signal Processing for Wireless Receivers, Signals, Systems and Computers, 2000; Conference Record of the Thirty-Fourth Asilomar Conference, Bd.1, 29 October 2000, pp. 78-83. |
| | Fornaciari, W. Et al., System-level power evaluation metrics, 1997 Proceedings of the 2nd Annual IEEE International Conference on Innovative Systems in Silicon, New York, NY, October 1997, pp. 323-330. |
| | Schmit, H. Et al., Hidden Markov Modeling and Fuzzy Controllers in FPGAs, FPGAs for Custom Computing Machined, 1995; Proceedings, IEEE Symposium on Napa Valley, CA, April 1995, pp. 214-221. |
| | Simunic, T. Et al., Source Code Optimization and Profiling of Energy Consumption in Embedded Systems, Proceedings of the 13th International Symposium on System Synthesis, September 2000, pp. 193-198. |
| EXAMINER | DATE CONSIDERED |

| | |
|--|--|
| INITIALS | AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC. |
| <u>EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</u> | |